PDS Lab Test 2, Problem (a) (March 11, 2022)

Time: 1:30 hrs, Marks: 20, (Filename: rollnumber_LT2a.c)

LT2a. A selector would like to select wicket-keeper for a cricket team. Preference is based on the height (cm) and weight (kg) of the players. The ideal height of a wicket-keeper is 160cm, and the ideal weight is 75kgs. The ranking criteria are as follows. The first preference criterion is to rank a player based on the closeness of their heights to 160cm. Among players of the same height, the preference criterion is the closeness of their weights to 75kgs. If both the above conditions are tied, ranking is done based on the unique shirt number of a player. Smaller shirt numbers are more preferred.

Write a program which reads an integer *n*, and then reads three arrays storing the following information about *n* players – (i) an integer array containing shirt numbers, (ii) an integer array containing height of the players, and (iii) an integer array storing the weight of the players. Assume that all values entered are positive integers, and shirt number entered are unique.

The program should print the shirt number, height, weight of the players in the decreasing order of preference. Values for a player should be printed on one separate line.

Input:

n = 5

```
2     180   110
4     162   74
3     158   74
5     170   65
1     165   110
```

Output:

```
3     158   74
4     162   74
1     165   110
5     170   65
2     180   110
```